

FIG. 1A Initial Demagnetizing Step

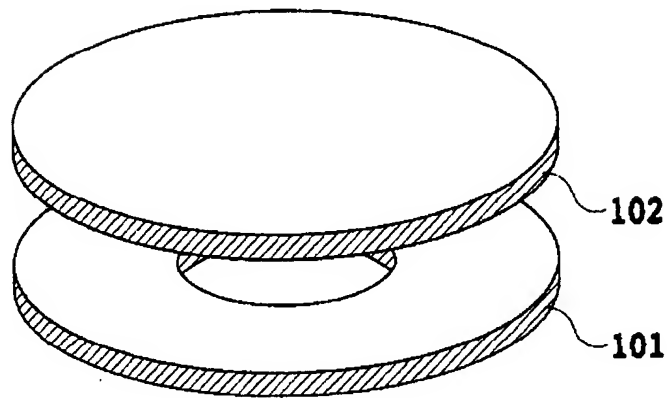


FIG. 1B Master Positioning Step

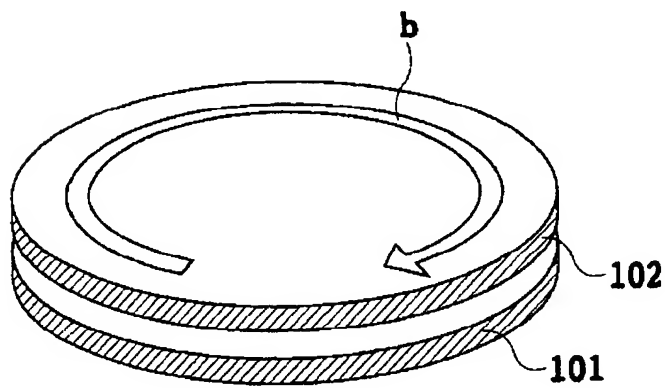


FIG. 1C Transfer Pattern Writing Step

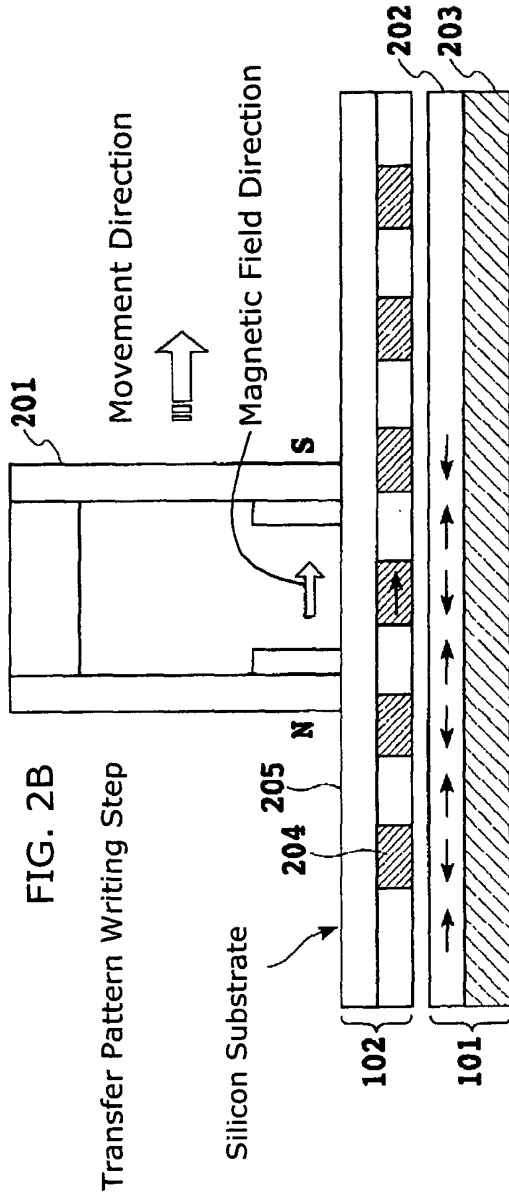
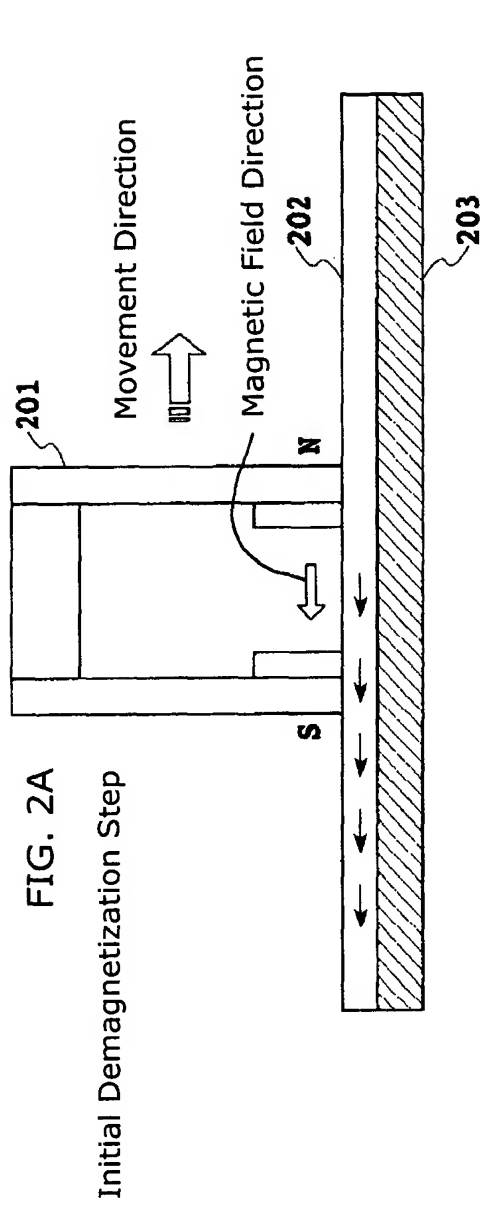
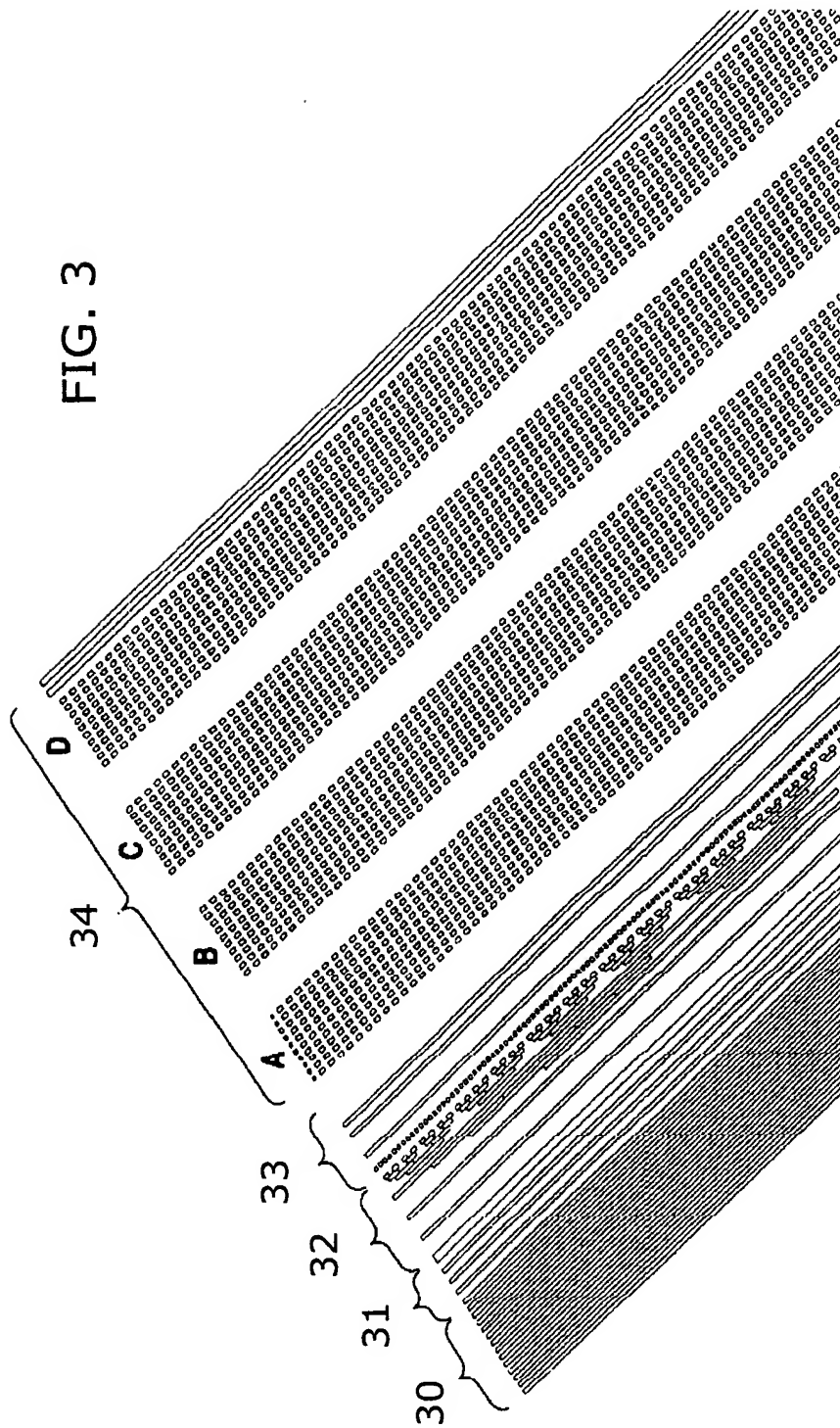


FIG. 3



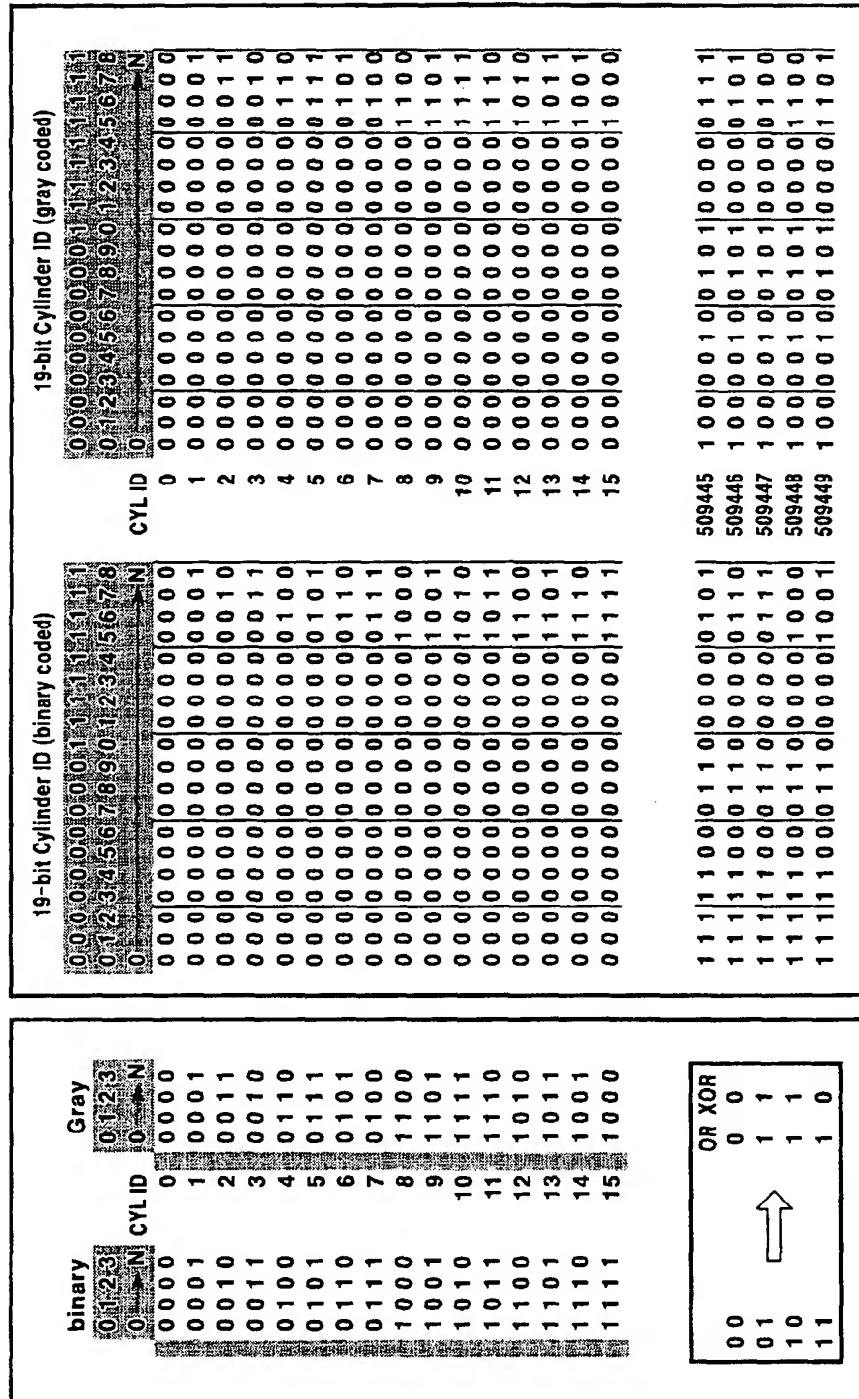


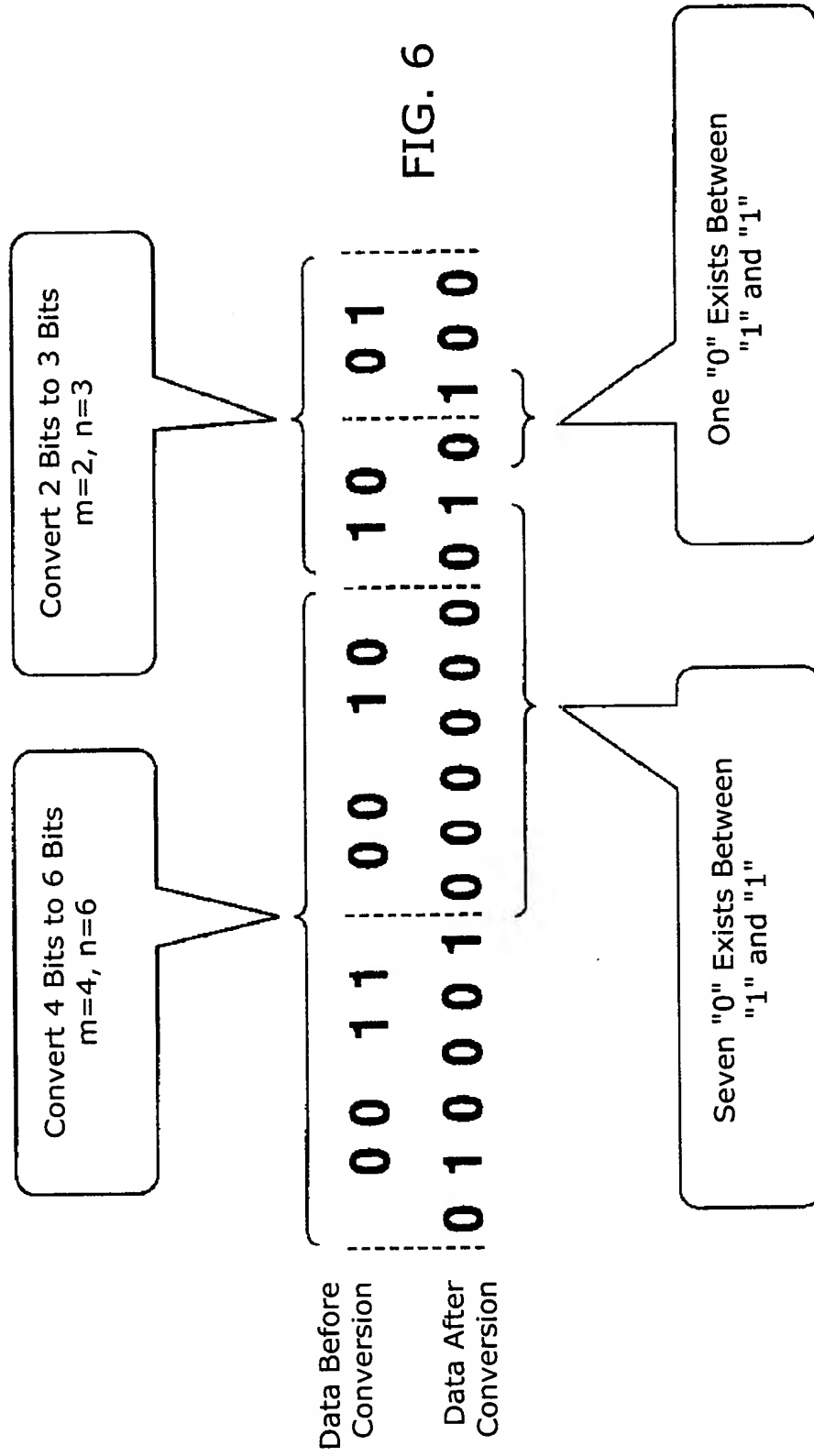
FIG. 4B

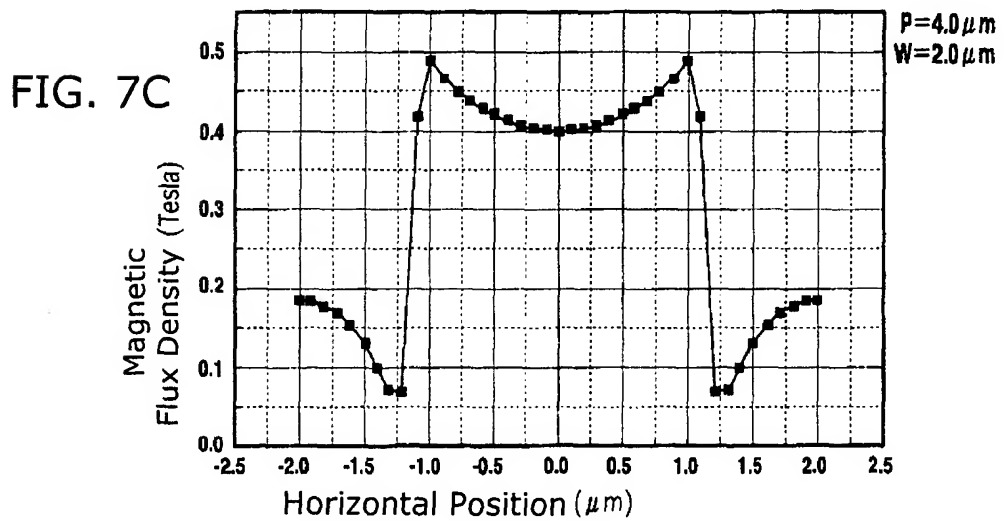
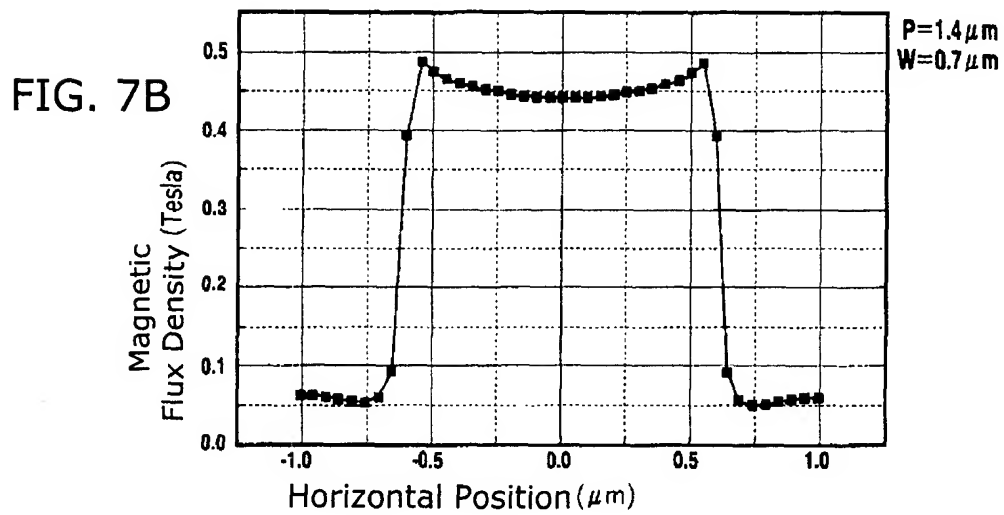
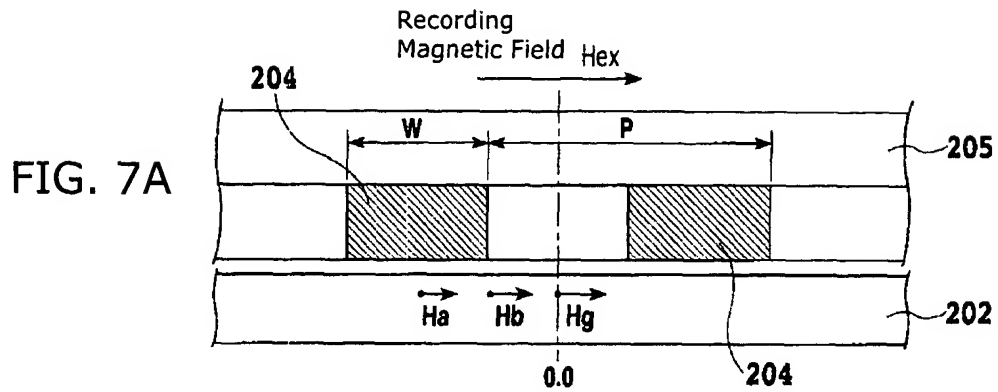
FIG. 4A

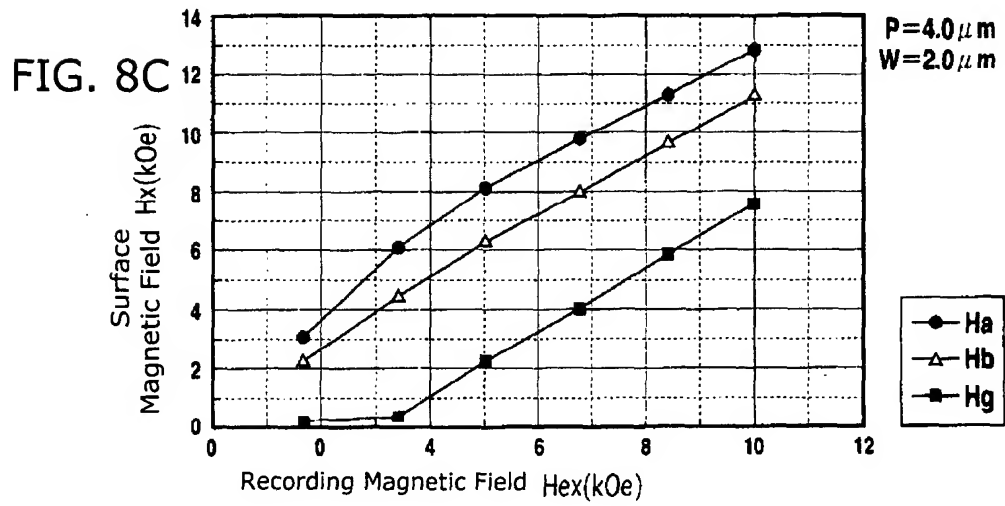
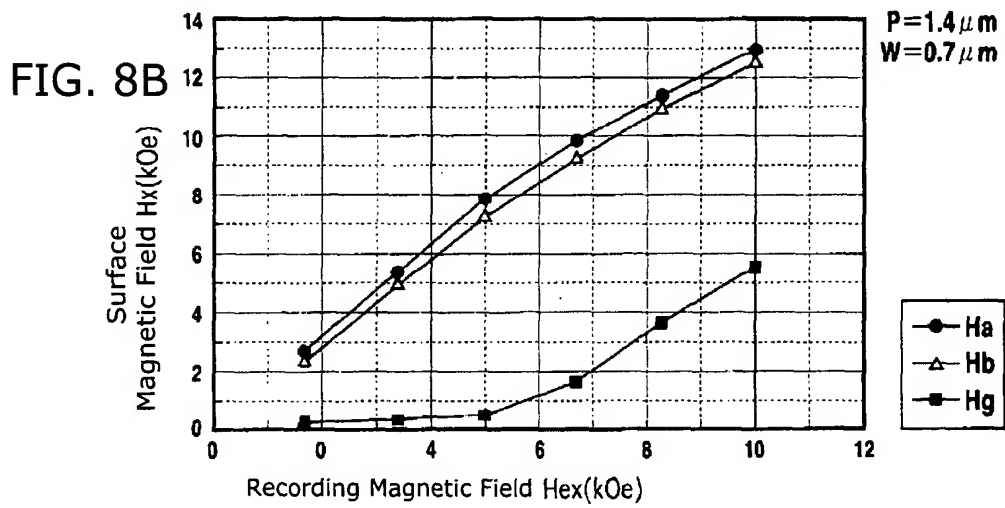
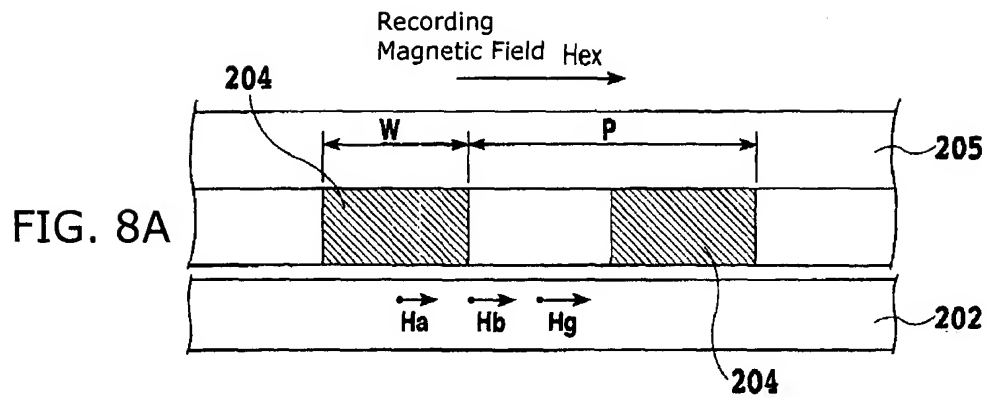
Data Before Moduation	Data After Modulation
01	X01
10	010
11	X11
0001	X00001
0010	X00000
0011	010001
0000	010000

X = 1 When the Bit After Modulation is 0

FIG. 5







Data Before Conversion	Data After Conversion
00	1001
01	1010
10	0101
11	0110

FIG. 9

	0, 1	2, 3	4, 5	6, 7	8, 9	10, 11	12, 13	14, 15	16, 17
0	00	00	00	00	00	00	00	00	00
1	00	00	00	00	00	00	00	00	01
2	00	00	00	00	00	00	00	00	10
	:	:	:	:	:	:	:	:	:
154866	10	00	01	11	10	01	11	00	10
	:	:	:	:	:	:	:	:	:
262141	11	11	11	11	11	11	11	11	01
262142	11	11	11	11	11	11	11	11	10
262143	11	11	11	11	11	11	11	11	11

FIG. 10A (Data Before Conversion)

	0, 1	2, 3	4, 5	6, 7	8, 9	10, 11	12, 13	14, 15	16, 17
0	1001	1001	1001	1001	1001	1001	1001	1001	1001
1	1001	1001	1001	1001	1001	1001	1001	1001	1010
2	1001	1001	1001	1001	1001	1001	1001	1001	0101
	:	:	:	:	:	:	:	:	:
154866	0101	1001	1010	0110	0101	1010	0110	1001	0101
	:	:	:	:	:	:	:	:	:
262141	0110	0110	0110	0110	0110	0110	0110	0110	1010
262142	0110	0110	0110	0110	0110	0110	0110	0110	0101
262143	0110	0110	0110	0110	0110	0110	0110	0110	0110

FIG. 10B (Data After Conversion)

Data Before Conversion	Data After Conversion
00	100
01	X01
10	X10
11	011

X = 1: When the Preceding Bit After Conversion is 0
X = 0: When the Preceding Bit After Conversion is 1

FIG. 11

	0, 1	2, 3	4, 5	6, 7	8, 9	10, 11	12, 13	14, 15	16, 17
0	00	00	00	00	00	00	00	00	00
1	00	00	00	00	00	00	00	00	01
2	00	00	00	00	00	00	00	00	10
	:	:	:	:	:	:	:	:	:
154866	10	00	01	11	10	01	11	00	10
	:	:	:	:	:	:	:	:	:
262141	11	11	11	11	11	11	11	11	01
262142	11	11	11	11	11	11	11	11	10
262143	11	11	11	11	11	11	11	11	11

FIG. 12A (Data Before Conversion)

	0, 1	2, 3	4, 5	6, 7	8, 9	10, 11	12, 13	14, 15	16, 17
0	100	100	100	100	100	100	100	100	100
1	100	100	100	100	100	100	100	100	101
2	100	100	100	100	100	100	100	100	110
	:	:	:	:	:	:	:	:	:
154866	010	100	101	011	010	101	011	100	110
	:	:	:	:	:	:	:	:	:
262141	011	011	011	011	011	011	011	011	001
262142	011	011	011	011	011	011	011	011	010
262143	011	011	011	011	011	011	011	011	011

FIG. 12B (Data After Conversion)

FIG. 13

